Specification Amendments:

Please replace paragraphs [006] and [007] with the following amended paragraphs:

[006] With ATM, connections can be established with varying network guarantees concerning cell loss, cell delay, cell delay variance and throughput by choosing an "ATM Transfer Capability" (ATC) ~~[2]~~ and Quality of Service class (QoS class) ~~[3]~~. The amount charged for an ATM connection should preferably also reflect this additional flexibility, which is the subject of the present invention. An important aspect in determining the manner of charging for ATM connections is the direction (incentive) that the charging gives to the manner of network usage. In a traditional telephone network the time-related charge usually assures that the customer does not unnecessarily occupy the connection. In a traditional data network usually a volume rate is used, so that there is an incentive not to burden the network with unnecessary traffic. Another example is the application of an off-peak rate with a plan to shift a portion of the network traffic to periods outside the peak hours so that the network can have a smaller configuration and is thereby less expensive.

[007] The present state of the art usually envisages basing the charge of an ATM connection on two variables, i.e. a time component, the duration of time of the connection (session), and a volume component, the total number of ATM cells transmitted and/or received during the connection

~~[1]~~. Both variables can easily be measured, registered and processed into a charge during the connection. On processing of the values of the time component the price per unit can depend on various quantities. Examples of such quantities are the distance covered and time of the day or of the week, comparable with the usual charging for telephone. Examples of other quantities are the ATM parameters such as the Peak Cell Rate of the connection etc.

Please replace paragraph [011] with the following amended paragraph:

[011] The IP (Internet Protocol) is a connectionless packet switched technique that is used for the Internet. Current IP networks exclusively supply a so-called best-effort service. The network~~s~~ commits itself to make an effort to deliver the packet (datagram) at the destination but no guarantee is given; the packet can be lost in case of a congestion. It is customary to charge access to the Internet only, e.g., by a fixed amount per month (flat rate) or by a fixed rate per unit of time (hour) that the user is logged onto an Internet Service Provider. In this type of charging there is no relationship with the amount of data that a user asks or offers.

Please replace paragraph [016] with the following amended paragraph:

[016] One of the proposed possibilities is to use reservations, e.g., with the protocol RSVP ~~[4]~~. In that case it is desirable that the extent of the reservation requested or made and the duration of the reservation is expressed in the charge.

Please replace paragraphs [021] and [022] with the following amended paragraphs:

[021] To this end, the invention proposes not to measure and charge the total number of data units (cells, IP datagrams, bytes in IP datagrams) during the whole connection (session), but to subdivide a connection in shorter or longer measuring periods, to measure the number of data units during such measurement periods and base the charging on that. The invention comprises hereunto a measurement device for measuring the number of data units received and/or transmitted during a set period of time, shorter than the time during which said telecommunication connection is open or active. Instead of measuring the number of data units over a fixed period, it is conversely also possible to measure the duration of time between the reception or transmission of a specific number of data units. Furthermore, the invention comprises a calculation device for calculating for each set or measured period of time the number of data units per unit of time and offering that calculation result a billing system. The calculation

device calculates thus per ~~û~~-- shorter or longer ~~û~~-- period the real data units / time ratio, whereby the billing follows the actual network load more accurately. Thus, for the user an incentive can be created not to offer the data in bursts but more evenly and thereby contributing to a more efficient network use.

[022] The measuring period can be equal to the interarrival time of two consecutive cells of a same connection. The rate over the period from ti until and including ti+1 is then equal to 1/(ti+1 ~~û~~-- ti), in other words, the inverse of the difference of the arrival and send times of two consecutive cells. The measuring period can also be longer, e.g., the time between cell number i and cell number i+n, where n>1. The measuring period can also be a set period, e.g., 100 ms. It will be appreciated that the shorter the measuring period is, the more accurate the measurements are, but also the larger the calculation capacity of the charging computer has to be. Also, it requires transmission traffic between the charging measurement points and the charging computer.